UNITED
NATIONS

TD

United Nations
Conference
on Trade and
Development

Distr.
GENERAL

TD/B/COM.3/10/Add.1
3 October 1997

Original: ENGLISH

TRADE AND DEVELOPMENT BOARD
Commission on Enterprise, Business
Facilitation and Development
Second session
Geneva, 1 December 1997
Item 4 of the provisional agenda

SERVICES INFRASTRUCTURE FOR DEVELOPMENT AND TRADE EFFICIENCY ASSESSMENT

Addendum

Proposal for a Trade Efficiency Assessment Methodology (TEAM)

Report by the UNCTAD secretariat

GE.97-51712

CONTENTS

Page

I. INTRODUCTION 3

II. STAGE 1 - ASSESSMENT OF THE COUNTRY'S GENERAL TRADING ENVIRONMENT . . . 6
1. **Assessment of the current trade situation** 6
(a) Determining the economic and social framework 6
(b) Trade flows 6
(c) Structure of trade 7
(d) Types of enterprises and trading partners by country . . . 7
2. **Dynamics of trade** 8
(a) National plans 8
(b) New exports 8
(c) Interest groups 9
(d) Level of SME participation 9

III. STAGE 2 - CENSUS OF TRADERS' PERCEPTIONS 9
1. **Approach per sector** 10
(a) Customs 10
(b) Transport 10
(c) Banking and insurance 11
(d) Business practices/trade facilitation 11
(e) Business information 12
(f) Telecommunications 12
2. **A census of the views of trading partners with regard to the trade efficiency of a country** 13

IV. STAGE 3 - ASSESSMENT OF THE SIX KEY TRADE EFFICIENCY SECTORS 14
1. **Customs** 14
2. **Transport** 15
3. **Banking and insurance** 16
4. **Business information** 18
5. **Trade facilitation/business practice** 19
6. **Telecommunications** 20

V. STAGE 4 - IMPLEMENTATION AND EXPECTED OUTPUT OF THE TRADE EFFICIENCY ASSESSMENT METHODOLOGY (TEAM) 21
1. **Initiating the assessment** 21
2. **A typical assessment** 21
3. **The expected output of the trade efficiency assessment** . 23
4. **Implementation of the results of the trade efficiency assessment** 23

Boxes

Box 1: Trade Policy Review Mechanism of the World Trade Organization
Box 2: UNCTAD's Science, Technology and Innovation Policy Reviews (STIP)
Box 3: UNCTAD's Investment Policy Review (IPR)

I. INTRODUCTION

1. At the first session of the Commission on Enterprise, Business Facilitation and Development (20 - 24 January 1997), it was agreed that UNCTAD should develop its strategic approach to and enhance its analytical capacity for trade efficiency, with the emphasis on building trade competitiveness of smaller firms, mainly in developing and least developed countries (LDCs). The Commission instructed UNCTAD to pursue its work in formulating an analytical and methodological basis on which a trade efficiency assessment exercise could be organized[1]. This document provides an outline of what such an exercise would entail in terms of the role of UNCTAD, the type of assessment and how it will be undertaken.

2. The methodology described in the present document (later on referred to as TEAM, for Trade Efficiency Assessment Methodology) aims at satisfying a limited set of objectives under a precise array of constraints.

3. The objectives are as follows:

- To assess the results obtained and difficulty encountered by member countries in implementing the Columbus Recommendations[2] in each of the trade efficiency sectors (customs, transport, banking and insurance, business information, trade facilitation and telecommunications);
- To provide a basis for further assistance and support needed by member countries in implementing such recommendations;
- To identify priority areas for action to enhance the international competitiveness of member countries and of their respective enterprises (especially small and medium-sized ones) through practical improvements in each of the trade efficiency sectors.

4. The constraints are as follows:

- An assessment mechanism should not duplicate other assessment endeavours of a similar or related nature;
- Such a mechanism should be light from the point of view of resources used, easy to implement and easy to read and use; it should also have immediate applications at the practical level, e.g. for the trade competitiveness of small and medium-sized enterprises;
- It should be adapted to the specific economic, technological and regulatory contexts of interested countries while being uniform enough to allow international comparisons and consolidation;
- It should remain a voluntary exercise, but be attractive enough to allow reference to a significant sample of countries.

5. Trade efficiency assessment will serve to better inform UNCTAD of the precise needs of member States. More importantly, it will inform concerned member

---

[1] "Report of the Commission on Enterprise, Business Facilitation and Development on its first session" (TD/B/44/2 - TD/B/COM.3/4), annex II.

[2] UNCTAD/UNISTE, Recommendations and Guidelines for Trade Efficiency. TD/SYMP.TE/2

States as to the level of their trade efficiency in each of the six key sectors' from the perspective of their own enterprises; how they compare internationally; and how and where technical assistance can improve the situation. The UNCTAD Trade Efficiency Assessment Methodology applies mainly at the enterprise level and therefore will complement other trade assessment initiatives such as the WTOs' TPRM (see box 1). UNCTAD's Science, Technology and Innovation Review (STIP) and Investment Policy Review (IPR)(see boxes 2 and 3) will serve as valuable sources of information for TEAM.

Box 1: Trade Policy Review Mechanism of the World Trade Organization

The Trade Policy Review Mechanism (TPRM) was established in 1989, on a provisional basis, as an outcome of the Uruguay Round. The status of the Mechanism was agreed by Ministers in April 1994.

The objectives are set out in Annex 3 to the Marrakesh Agreement, as follows: "to contribute to improved adherence by all WTO Members to rules, disciplines and commitments made under the Multilateral Trade agreements and, where applicable, the Plurilateral Trade Agreements, and hence to the smoother functioning of the multilateral trading system, by achieving greater transparency in, and understanding of, the trade policies and practices of Members. Accordingly, the review mechanism enables the regular collective appreciation and evaluation of the full range of individual Members' trade policies and practices and their impact on the functioning of the multilateral trading system. It is not, however, intended to serve as a basis for the enforcement of specific obligations under the Agreements or for dispute settlements procedures, or to impose new policy commitments on Members".

All WTO Members are subject to review under the TPRM, and the frequency of review of a member is subject to its weight in the multilateral system, as defined by the member's share of world trade in goods and services.

The reviews conducted by the Trade Policy Review Body (TPRB) comprise two components: a policy statement by the Member under review and a comprehensive report drawn up by the WTO Secretariat. The reports and the minutes of the review are published following the TPRB meeting.

The reports drawn up by the secretariat are prepared on the basis of replies by the Member under review to a questionnaire elaborated by the secretariat, discussions with national authorities during a visit to the country, and information collected by the report writers from other various sources. The reports by the secretariat have four chapters: first, the economic environment of the Member, second, the trade and investment policy framework, third, trade policies and practices by measure, and fourth, sectoral trade policies and practices. The report written by the Government usually presents the country in the multilateral system, then the main trade policy developments for the overed period and the future direction (development) of the trade policy.

The TPRM is a unique tool to review the full range of trade policies and it provides a well founded analysis of developments in trade policies and practices.

Sources: WTO Trade policy review mechanism, Report to the Singapore Ministerial Conference (WT/TPR/27 and http://www.wto.org/wto/reviews/reviews.htm).

6. The proposal provides for four elements, namely: (1)an assessment of the general trading environment, which will provide the assessors with a framework in which the work is conducted and will assist in establishing a country's trade structure when calculating an index for international comparisons; (2) a census of the traders' (enterprises') views on the efficiency of the different sectors; (3)an analysis of the trade efficiency of each of the sectors; and (4) practical proposals on how the Trade Efficiency Assessment Methodology (TEAM) will be implemented.

' The six key sectors as discribed in the Recommendations and Guidelines for Trade Efficiency (TD/SYMP.TE/2).

Box 2: UNCTAD's Science, Technology And Innovation Policy Reviews (STIP)

Pursuant to the report of the Secretary-General of UNCTAD to the ninth session of the Conference, in Midrand, South Africa, (TD/366) and to ECOSOC's resolution E/1944/4, UNCTAD and the Commission for Science and Technology for Development will, under invitation from the country concerned, undertake Science, Technology and Innovation Policy (STIP) Reviews.

The role of UNCTAD is to assist interested countries to evaluate and strengthen the contribution of science and technology policies and institutions to the development of their productive sectors and to encourage external support in this task.

The review aims at :
(a) Improving the policy-making capacity of public institutions in charge of science and technology;
(b) Enhancing the policy-making capability of Governments with respect to science and technology and its relevance to the broader development strategy;
(c) Strengthening the technological infrastructure.

Reviews proceed in the following way. Upon invitation from the country, the secretariat carries out a brief programming mission and, together with the local authorities, designs the content and the guidelines of the country's background report. Then a small team of international experts, chosen jointly, carries out an independent evaluation of the country's STIPs. The review team prepares a report with its own assessment of the STIP system in the country and suggests appropriate policy options. Finally a further meeting takes place in the country, between the international experts, the secretariat and the key local actors in the science, technology and innovation system, in order to bring the policy review to the attention of the local community.

Source: Science, technology and innovation policy reviews, note by the UNCTAD secretariat to the Commission on science and Technology for Development (E/CN.16/1997/5).

Box 3: UNCTAD's Investment Policy Review (IPR)

Through Investment Policy Reviews, UNCTAD provides countries with a tool for assessing how they stand today in attracting FDI of the right kind in consonance with stated national objectives and incorporating a medium- to long-term perspective on how to respond to emerging regional and global opportunities. The IPRs focus on investment in productive sectors, mastery of technology and the development of a dynamic competitive enterprise sector, which are important elements for achieving sustainable progress.

The IPRs respond to the mandate given at UNCTAD IX at Midrand whereby UNCTAD should focus, inter alia, on "continuing investment policy reviews with member countries that so desire in order to familiarize other Governments and the international private sector with an idividual country's investment environments and policies" ("A Partnership for Growth and Development", para. 89(c)).

The IPRs involve an analysis of strengths, weaknesses, opportunities and threats, encompassing the following:
(a) An examination of the country's objectives and competitive position in attracting FDI, providing a dynamic, medium- to long-term perspective on how to tap emerging regional and global opportunities;
(b) An audit of the country's FDI policy framework and administrative structures and procedures, identifying how legislative, administrative and institutional structures can be made more consistent;
(c) A review of the FDI data monitoring system to ensure that the country gets the right feedback to determine the impact of FDI on the economy, to evaluate the success of promotional activities and to plan how to take advantage of investment possibilities; and
(d) A survey of firms with foreign participation to obtain investors' perceptions and experiences, thereby informing policymakers on how firms are likely to react to different policies and strategies, and why.

II. STAGE 1 - ASSESSMENT OF THE COUNTRY'S GENERAL TRADING ENVIRONMENT

7. Countries differ in their trading circumstances, and in order to determine a trade efficiency index for the purpose of international comparison, it will be important to determine the context in which the trade efficiency of a country can be measured. An assessment of the general trading environment would include an analysis of the current trade situation of that country and the dynamics of trade that are influencing that trade environment.

1. Assessment of the current trade situation

(a) Determining the economic and social framework

8. Economic and social indicators describe the environment in which traders in a country have to operate. For example, countries with a small population or a low per capita income would provide different sets of obstacles and opportunities for traders than would a country with a large population or a much higher per capita income. Many countries lack human resources (skills) and capital (savings, taxes, foreign direct investment), and this will limit the potential to develop their international trade competitiveness and their capabilities with regard to becoming trade efficient. A description of the trade environment of a country will guide the assessors in formulating their specific objectives for the study of that country. Indicators of importance are, for example, population size, gross domestic product, balance of trade, per capita income, the unemployment rate, the inflation rate, the level of debt per capita, levels of education, levels of savings, levels of foreign direct investment, government trade policies (tax incentives for investors), and the exchange rate per US dollar, etc. Most of these indicators are readily available in UNCTAD's statistical yearbooks and other publications.

(b) Trade flows

9. Statistics showing trade flows provide an indication of the level of international trade taking place in the country being assessed, the relative importance of certain commodities, goods and services in relation to the value of total exports, and who the main trading partners are by country (traditional and new partners). They will also indicate whether or not there has been a growth or decline in the value of imports and exports over a period of years. These statistics are expected to be available with the national customs authorities. Other possible national sources of information include trade promotion organisations, banks, chambers of commerce, industry associations, etc, and will vary from country to country in terms of how the information is presented and how accurate and up-to-date it is. International sources of information that are available include COMTRADE[4], TRAINS[5], the International

---

[4] COMTRADE is the compressed international COMmodity TRADE statistics database of the United Nations Statistical Office (UNSO).

[5] TRAINS, for Trade Analysis and Information system, contains information from UNCTAD's Database on Trade Control Measures combined in an integrated manner with other relevant trade information components. It is also available in CD ROM form.

Trade Centre's PC/TAS[*], UNCTAD, EUROSTAT of the EU, the World Competitiveness Report of the World Economic Forum, international banks and commercial data bases such as Reuters, Dow Jones, etc.

(c) Structure of trade

10. Determining the most important industries involved in international trade will provide an indication of the structure of the trading environment for the country concerned. For example, a country that relies mainly on export revenues from one or two commodities will most likely exhibit a trading structure comprised mainly of large enterprises or monopolies (often state-owned), whereas a country that has a high level of manufactured exports will most likely exhibit a trading structure involving a greater number of enterprises, particularly small and medium-size enterprises. Available references which would provide indications of this situation are the diversification and concentration indexes published in table 4.5 of the UNCTAD Handbook.

11. A further indicator of the trade structure will be a listing of enterprises involved in the export of each commodity or product, showing to what extent large enterprises have vertically integrated their activities.

12. The trading structure has implications for the trade efficiency of the country in that it will impact on the availability and accessibility of trade-related services. A trade structure involving many enterprises, particularly SMEs, will require widely available and accessible trade-related services and a closer integration of the services of key sectors, whereas a trading structure involving a few large enterprises will tend to have many of the trade-related services in the enterprises themselves, with a low level of availability and accessibility to newcomers.

(d) Types of enterprises and trading partners by country

13. Linked to the structure of trade is the importance of identifying the types of enterprises operating in terms of their size. It is likely that smaller enterprises are more vulnerable to the quality and level of trade-related services, whereas larger enterprises have the capacity to be more autonomous or have a greater leverage on the services. Identifying types of enterprises according to sector will give indications as to what types of services are required. For example, commodity exporters tend to make more use of bulk transport systems, whereas manufactured exporters will tend to use ISO freight containers and multimodal transport systems. These needs will be reflected in differing experiences in terms of trade efficiency.

14. Enterprises exporting to or importing from a country will have differing perceptions with regard to how efficient that country is in terms of trade. Trade routes to certain countries may be highly efficient in terms of transport

---

[*] PC/TAS (Trade Analysis System on Personal Computer) is a CD ROM that presents five-year time series of international trade statistics with market share and trend analyses by country and product (SITC3).

UNCTAD Handbook of International Trade and Development Statistics 1995.

costs and services but inefficient to and from other parts of the world. Determining who the trading partners are by country is important in analysing whether trade efficiency is higher between certain trading partners.

2. Dynamics of trade

15. Various dynamics within a country influence the trading situation of that country. These dynamics could include government policy towards trade, national strategies to encourage certain types of exports, the presence of interest groups and the level of small and medium enterprise activity in international trade.

(a) National plans

16. Most Governments have realised the importance of being part of the global economy and have already initiated or aim to initiate various programmes to assist their enterprises in becoming internationally competitive. Government policies on international trade are often reflected in their levels of import tariffs and the existence of non-tariff barriers or the way in which they support their exporters. In this context, Governments are committed to adapting their trade policies in line with the Uruguay Round Agreements, which aim to liberalise and globalise world trade. National plans to internationalise a country's economy can include awareness and training programmes on trade, various export incentives, trade-related infrastructure programmes(e.g. ports) and capacity-building programmes to enable SMEs to compete internationally.

17. The TEAM will also look at how the national plans of the country have taken into account important international developments, for example the Telecommunications Agreement* signed in Singapore and the recent developments in electronic commerce. The World Trade Organization's Trade Policy Reviews will provide a valuable source of information in this regard.

(b) New exports

18. New exports may have arisen either as a result of government initiatives to build a capability in a particular area, the removal of barriers previously preventing those exports, or the reaction of enterprises to new opportunities. Examples include the role of the Dutch Government in building an infrastructure and research and development capability to allow the Netherlands to become the world's leading flower exporter, or South Africa, where, as a result of the abolition of centrally controlled marketing channels for the export of wine, farmers are now able to develop their own export markets, resulting in a substantial increase in wine exports).

19. New exports are an important dynamic, as they may lead to the discovery of new competitive advantages for a country. They could also have a positive effect on trade efficiency in that they place new demands on trade-related services, but they could at the same time highlight inefficiencies in the trading system not previously experienced.

---

* WTO Singapore Ministerial Declaration (WT/MIN(96)/DEC, http://www.wto.org/govt/mindec.htm)

(c) Interest groups

20. Interest groups are normally most vocal when they feel their existence is threatened. For example, middlemen offering services in assisting traders having difficulties with complicated trade procedures may be threatened by the possible simplification of these trade procedures. Certain government departments administering cumbersome procedures may feel that their role will be diminished as a result of improved efficiencies. Trade inefficiencies often create opportunities for corruption, and those benefiting from such practices will try to counter any initiative that would affect their situation.

21. A trade efficiency assessment may therefore experience resistance from these players, and the mandate for the assessment must therefore be such as to made it possible to deal with this type of resistance. On the other hand, support can be expected from enterprises that hope to gain from the improvement in trade efficiency. In this regard, it will be important to explain the objectives of the assessment with a view to building understanding and support for the initiative.

(d) Level of SME participation

22. Research has shown that there is a direct relationship between the emergence of SME exporters and the growth of exports from developing countries, an example of this being provided by the Republic of Korea. In many developed countries, SMEs are responsible for up to 50% of total exports, as for example in Italy.[9] The TEAM will involve assessing the level of SME participation in exports and the areas in which SMEs are prevalent. By focusing on SMEs, the TEAM will make it possible to identify some of the core areas affecting trade efficiency in the six trade related sectors.

III. STAGE 2 - CENSUS OF TRADERS' PERCEPTIONS

23. This part of the assessment will form the core element in terms of identifying and quantifying the trade efficiency of a country. As it is traders (enterprises) who are ultimately the main beneficiaries of the effects of trade efficiency and who in return are the driving force in an economy, it is clear that the emphasis should be placed on this sector.

24. Traders are not necessarily experts in any of the key trade efficiency sectors but will, however, have experienced directly or indirectly the impact of these sectors at some point during the trading process. They will respond to the census by stating their perceptions of the performance of the key sectors in relation to the "Recommendations and Guidelines for Trade Efficiency (UNISTE 1994)"[10]. Interviews will therefore be structured along the lines of the recommendations, and questions will be phrased to solicit specific responses relating to the recommendations. Rating scales and other questionnaire techniques will be employed to enable the assessors to quantify the perceptions

---

9 Source: Exports from Small and Medium-sized Enterprises in Developing Countries, International Trade Centre, Geneva, 1993.

10 "Recommendations and Guidlines for Trade Efficiency", (TD/SYMP.TE/2).

as far as possible.

25. It is expected that traders will differ depending on their field of reference. For example, traders based in different locations will have varying access to trade-related services, or a trader in certain products may experience more efficiency than others. The questionnaire will therefore take cognisance of these factors and, in conjunction with the section on the general trading environment, apply an appropriate weighting in order to obtain a national rating.

26. The census is an analysis of the perceptions of traders and not an analysis of the efficiency of the sectors themselves. The results of this census will, however, contribute to the analysis of the sectors, for example by informing key role players of the perceptions of traders and soliciting a response from them as to why such a perception exists.

27. Selected traders will be surveyed either by mail (a greater number of enterprises can be reached) or by personal interviews (a smaller number of traders are solicited), but only where the quality and level of the responses can be assured.

1. Approach per sector

(a) Customs

28. In most cases, the trader will not have had direct dealings with the customs authorities and most probably will have made use of the services of a freight forwarder (for exports) or a clearing agent/broker (for imports). He will, however, have felt the impact of customs clearance in the form of procedures and requirements, for example the need for specific information or documentation. Mistakes made either by himself or his broker may have resulted in delays and extra costs.

29. In assessing the views of traders with regard to customs, the following points are examples of what could be included in the questionnaire: the availability and quality of freight forwarder and customs clearance/broker services; documentary requirements for customs clearance; average time taken to obtain customs clearance; experiences of delays and cost of delays; impact of customs regulations on trading opportunities; and the extent to which the requirements of the customs administration are easily understood.

(b) Transport

30. Depending on the destination or origin of the goods and the mode of transport being used, traders are likely to express a variety of opinions with regard to the cost, trade efficiency and ease of access of transport services. With regard to access to different international destinations, it is expected that, for example, airfreight will attract more positive responses than road and sea freight. Traders operating close to ports or airports may have a different view on transport services from those operating from outlying and rural areas, and the location of the respondent in relation to the services will be noted in the questionnaire for weighting purposes.

31. It is expected that traders will view the efficiency of transport services from two main perspectives, namely access to regular and reliable services and the cost of those services. The following points are examples of what will be included in the questionnaire: availability of transport services; accessibility of transport infrastructure; cost of transport services; access to marine insurance and cost thereof; and availability of information, e.g. cargo tracking.

(c) Banking and insurance

32. Traders will express their needs in accordance with their knowledge of the various aspects of banking and insurance and how they have experienced this trade efficiency sector in the course of their trading. Initial and obvious points to be expected are comments on the accessibility and cost of trade finance, credit risk insurance and instruments of payment. Barriers to trade such as limited access to foreign exchange and exchange control regulations are expected to be major issues in many LDCs and developing countries. In more sophisticated trading, comments on the availability of and access to modern trade finance and risk management products will take on more importance.

33. In surveying the needs of traders, the following main points concerning banking and insurance will be addressed, firstly to assess the perception of the trader in terms of these points and secondly to determine the level of awareness of these various points among traders: the availability of, access to and cost of various forms of trade finance, credit risk insurance products, instruments of payment and risk management instruments; access to credit information; currency issues such as understanding of exchange rates and trading in a foreign currency; the effects of exchange controls (if applicable) and other banking regulations; views on the services of and choice of banking institutions; and the use of modern information technology links with financial institutions.

(d) Business practices/trade facilitation

34. Traders, particular new exporters, tend to rely heavily on their service providers, e.g. banks or freight forwarders, to advise them on the business practices involved in trade transactions. Knowledge and awareness of international rules and standards (e.g. Incoterms[11]) or the use of standardised documents is generally poor. This knowledge gap is reflected in the way in which sales contracts are negotiated and the resulting procedural conflicts. An example of this concerns Incoterms that do not correctly reflect the intentions of the buyer and seller in terms of the sharing of costs and responsibilities in delivering the goods.

35. Trade facilitation is enhanced if enterprises can use electronic trading, but such trading may be limited by the current ability of trade-related services to interact electronically (e.g. electronic declarations to customs). If a Trade Point is operational in a country, the degree to which that Trade Point offers trade facilitation services will be an indicator of the current possibilities for full electronic trading in that country.

---

[11] Incoterms 1990 , ICC Publication number 460
http://itl.irv.uit.no/trade_law/documents/sales/incoterms/nav/inc.html.

36. The census will aim to assess the level of awareness of the trader in terms of business practices by including the following points in the questionnaire: awareness of Incoterms, UCP 500, EDIFACT, the UN Layout Key, etc; the use of these in business; awareness of who the players involved in the trade process are; perceptions of the trade procedure in general; how traders interact with service providers; and levels of discrepancies in documentation resulting in delays.

37. The degree to which traders are able to facilitate trade through effective trading systems and traders' perceptions of electronic commerce will be assessed by including the following points in the questionnaire: awareness of Trade Points; use of Trade Points or similar electronic trading systems; level of computer literacy and preparedness to make use of electronic trading; and access to electronic trading and level of trade facilitation by electronic means.

(e) Business information

38. Poor access to appropriate business information is considered by many small and medium-size enterprises to be the major barrier in terms of being able to take advantage of international trading opportunities. In addition, problems of availability, selection and international standardisation hamper enterprises in understanding and applying that information for trade. The dissemination of trade information is largely dependent on the capacity and abilities of trade promotion organisations in a country. It may be found that certain areas have better access to information than others and that traders are unaware of the types of information that could be available locally and internationally.

39. The assessment will aim to solicit the views of traders with regard to the availability and quality of trade information, and how the lack thereof impacts on their performance. Areas to be covered in the questionnaire include: awareness of institutions or service-providers making trade information available; the quality of that information; the cost of obtaining information; the degree to which the trader is able to use electronic sources of information; and the awareness of traders of the different international sources of information.

(f) Telecommunications

40. The importance of telecommunications to trade is becoming more evident as the various trade-related services come to rely more and more on this means of communication. The availability of telecommunications infrastructure and services will therefore impact on traders' access to information and their ability to communicate with their customers and trade services. The degree to which Internet services are available in a country is becoming important in order for traders to make use of electronic commerce. Non-connected countries run the risk of being further marginalised as electronic commerce takes root.

41. Traders will have particular ideas as to their need for telecommunications for trade, and their levels of usage will vary between the different types of services. The survey will aim to obtain an insight into the level of awareness of traders with regard to the uses for telecommunications in trade, what access

they have and how they perceive these services to be important to their business. Some points to be covered are: what telecommunications are currently accessible; to what extent are they used by the trader and how; whether the trader has access to the Internet; whether international networks, e.g the Trade Point network, have been used for trade; and whether trade efficiency sectors such as the banking and transport sector offer access to their services by electronic means.[12]

2. A census of the views of trading partners with regard to the trade efficiency of a country

42. It will be difficult to identify suitable candidates for the census, as enterprises are usually reluctant to divulge information on who their trading partners are, and those trading partners may have reservations in participating in the survey. The sample for this part of the assessment is therefore not expected to be very large, and information obtained from this census will be seen as general comments rather than as representative of the views of all trading partners.

43. In surveying the views of trading partners, clear distinctions will be made between those importing from the country and those exporting to the country. Importers from the country are unlikely to have had to deal with too many barriers as, if they had, they would simply be importing from another source (unless, for example, that country was the only source for that product). The most likely sector expected to attract comments from importers is the transport sector, as the availability and quality of transport services would have had an impact on their business in the form of delays or costs. Availability of information about the target country would also be an important consideration (e.g. availability of information on suppliers, etc.).

44. In surveying the views of exporters to the country, it is expected that comments will be made with regard to all the key trade efficiency sectors, as exporters to that country would have experience of all of these sectors in some way or other. Security of payment and regulations affecting payment would be considered as the main concerns, followed by customs-related issues, e.g. level of duties, requirements in respect of import permits, etc., followed by the quality of transport services. Exporters generally prefer to deal with countries with good credit ratings, where the cost of credit risk insurance is not high or where they are able to deal with credible financial institutions to facilitate payment. The customs sector affects the ability of the exporter to go to a country and to be competitive in that country, and an inefficient or corrupt customs sector would be considered a major barrier to trading.

45. A questionnaire will be designed accordingly and will be distributed by mail.

---

[12] UNCTAD, "Telecommunications, Business Facilitation and Trade Efficiency. Some major implications of the Global Information Infrastructure (GII) for trade and development" (TD/B/COM.3/EM.3/2).

IV. STAGE 3 - ASSESSMENT OF THE SIX KEY TRADE EFFICIENCY SECTORS

46. The level of efficiency in one trade efficiency sector will impact on the other sectors and therefore on the overall trade efficiency of a country. The extent to which a sector is efficient can be measured by using indicators specific to that sector or by soliciting perceptions from players working within the sector and from those in the other sectors. Appropriate players to be interviewed must be identified for each sector, along with various types and sources of information which will provide the necessary information for the assessment.

1. Customs

47. Customs plays a key role in the international trade process because of its legally required intervention in the movement of goods crossing international borders. The interventionist nature of the Customs function inevitably places the Customs service at odds with traders, whose primary goal is rapid delivery or receipt of their merchandise at the lowest cost. Customs, as a government agency, has to execute government policy, and this, depending on what the Government expects from customs, will impact on how efficiently it can discharge its responsibilities. Should a Government rely heavily on its customs administration for the collection of revenue or for the enforcement of protectionist policies, it could seriously hamper any efforts made by that customs administration not to pose an obstacle to legitimate trade.

48. In a rapidly changing global trade environment, customs authorities face many challenges rought about by external sources over which it has little or no control. These include dealing with: increases in the overall volume of trade; more rapid means of transport; greater demands from traders, for example in connection with "just in time" manufacturing concepts; the need to protect international intellectual property rights; greater risks of toxic waste dumping; and the increased need to protect endangered species. Customs authorities worldwide have been very proactive in taking up the challenge of trade efficiency through greater use of information technology, placing an emphasis on staff training and the implementation of risk management techniques.

49. In order to obtain an assessment of the trade efficiency of the customs sector of a particular country, the TEAM should view the performance of the customs administration in terms of: what the Government expects of it; the capability of its systems to perform its tasks efficiently; current levels of efficiency; and how efficiently it operates in relation to the other key sectors.

50. Indicators that would inform on the expectations of the Government include: the contribution of revenues from customs to total government revenue, the degree to which the Government has implemented the Uruguay Round Agreements, average levels of customs duties, whether customs is responsible for the collection of taxes, the various types and levels of taxes to be collected, and the number and types of government agencies on whose behalf customs must act, e.g. departments of agriculture, health, etc.

51. Indicators that would provide an insight into the capability of the customs administration include: the level and experience of management (number of years service, number of managers at the different levels), the management/staff ratio and the deployment of management, number of staff and the deployment of staff, entry qualifications to join the service, extent of training provided (formal training and on-the-job training).

52. Indicators that would provide information on current levels of efficiency of a customs administration include: time taken for various types of customs clearance (mode of transport/purpose of clearance, etc.), the number of stages through which a clearance must proceed (the procedure), the number of documents required, the degree to which the customs clearance procedure is automated, the efficiency of the automation (e.g. does data have to be re-inputted at any point), the extent of the proactiveness of customs, for example through the allowance of pre-arrival clearance, and the sophistication of the risk management techniques used by customs.

53. Indicators that would provide information on the functioning of the customs sector in relation to the other sectors include: clarity of the objectives of a customs service to parties outside the service, to availability and quality of customs brokers, the degree to which customs co-operate with brokers, the degree to which customs regulations are known and understood by brokers and traders, the level of co-operation with other sectors, e.g. ports, transport, banks, etc, the presence of trade facilitation committees, and the level of co-operation with the customs administrations of other countries, e.g whether data is exchanged with other customs administrations.

54. Players that would need to be interviewed are: customs management and staff, customs brokers (clearing and forwarding agents), business organisations (chambers of commerce), forwarding and clearing associations, traders, and trade policy officials.

2. Transport

55. Improvements in transport technologies have played a significant part in the growth of world trade. It is generally accepted that transport is not a barrier to trade in most of the developed countries and many of the newly industrialised countries of South-East Asia. This service is considered to be widely available, efficient and cost-effective in these regions. The transport sector, however, appears to be most inefficient in many developing and least developed countries, and it is often the main obstacle to international trade competitiveness for traders in those countries. Although international air and sea transport to those countries is generally efficient, traders are affected once the goods have been handed over from the international operator to the local party. The transport competitiveness of a country is therefore affected by the presence and quality of local infrastructure and facilities, the quality and availability of transport operators and intermediary services, the availability of information, the coordination between players, and government regulations. These factors will impact on the trader in terms of the cost of the final product, the reliability of delivery and the security of cargo, affecting their ability to compete globally.

56. In assessing the transport sector, the TEAM will have to divide the assessment into the different modes of transport (road, rail, air and sea) in relation to the different forms of transport (bulk, breakbulk, containerised). It is expected that these compartmentalized modes/forms will produce different results and, in many cases, operate totally independently of one another For example, bulk shipments tend to use specialised rail and port facilities from source to port and, because of the generally large investment, are very efficient, if compared with container traffic in the same country. The assessment would address this sector by, firstly, determining to what extent the sector coordinates its activities with other sectors; secondly, determining the availability of infrastructure; thirdly, making a census of transport operators and intermediary services; fourthly, carrying out a cost and efficiency analysis of the transport chain for the different types of needs (e.g. exporter - sea freight container, importer - sea freight container, exporter - airfreight, etc); and lastly, making an analysis of the transport regulations and the extent to which these affect the efficiency of the sector.

57. Indicators providing information on national coordination include: the presence of trade facilitation committees, the participation in these committees, their status, the presence of other associations such as shippers' councils, freight forwarders' associations, etc.

58. Indicators providing information on infrastructure include: number of ports/airports, facilities of ports, availability of road and rail infrastructure (km), transhipment facilities, etc.

59. Indicators providing information on availability of transport operators and intermediary services include: number and types of transport operators, whether they are private or government, presence of international operators, size of operators, number and type of intermediary services, etc.

60. Indicators of efficiency in terms of cost and time include: a survey of transport costs (e.g. per 6m container - export), an international comparison of rail and port costs, a list of the different costs, average transit times, an FOB/CIF cost comparison, etc.

61. Indicators that would provide information on the impact of transport regulations include: the degree to which regulations for road transport are harmonised with neighbouring countries, registration requirements, level of taxes, protection of state operators, etc.

62. Players that would be consulted with regard to the transport sector include: Government, port and airport authorities, trade facilitation committees, transport associations, transport operators and intermediary services, traders, chambers of commerce and international operators calling on that country.

3. Banking and insurance

63. The global banking and financial services sector is the most sophisticated of all the trade efficiency sectors. Trillions of US dollars are moved electronically between countries each day, and most international banks are linked to one another by means of SWIFT (Society for Worldwide Inter-bank

Financial Transactions). Due to this connectability, large international banks and insurance companies are able to offer a broad range of trade finance services to exporters and importers irrespective of their location. Access to these services in many of the developing and least developed countries is, however, limited to a few large corporations/parastatals/multinationals that have the necessary trade volumes and credit ratings to satisfy the requirements of the international institutions. Small and medium-size enterprises, particularly in LDCs, are left to deal with locally based institutions, of which a large percentage do not have acceptable international ratings and are part of an industry with a high rate of bank failures. Local trade finance tends to be expensive (high interest rates) and the trade finance products on offer is limited. National credit risk insurance schemes, usually obligatory, have often proved to be inadequate as claims are seldom paid.

64. The trade efficiency of the country is seriously affected by this situation in that SMEs are paying more for their trade finance and insurance and receive poorer quality services in return than their counterparts in the developed economies. They often do not have access to financing instruments such as factoring, forfeiting or risk management tools such as forward exchange contracts, and are further disadvantaged by government regulations such as exchange controls. They are left having to compete internationally with enterprises from the developed countries, while having to sacrifice a larger slice of their revenue to financial services, yet still remaining exposed to many of the risks associated with international trade.

65. In assessing the strength of the trade finance and insurance capabilities of a country, the TEAM will provide for an examination of its banking and insurance infrastructure, the different trade-related products on offer, their costs and the quality of service.

66. Indicators that would inform on the state of the local infrastructure include: number and size of banks and insurance companies operating in the country, public and private institutions providing trade financing, credit insurance or guarantee, local vs foreign owned companies, rates of insolvency, international bank credit ratings, insurance density, insurance penetration, etc.

67. Indicators that would inform on the different types of products available include: a census of products offered (e.g. letters of credit, forward exchange contracts, pre- or post-shipment finance), types of insurance products available (export credit insurance), government export credit guarantees, etc. As much as possible, quantitative data (on amounts of loans, exports covered, premiums, etc.) Will be used to assess their importance.

68. Indicators that would inform on the costs and quality of trade-related financial services would include: a census of the costs of trade-related products offered by banks and insurance companies, prevailing interest rates, exchange rates, disparities between rates charged to SMEs and large corporations, criteria to qualify for services, level of international acceptability, payment of claims, etc.

69. Players that would be interviewed for this sector include the central bank, export/import banks (when applicable), local and foreign banks and insurance

companies operating in the country, brokers (insurance) and the Trade Department (if offering export credit guarantee schemes).

4. Business information

70. Availability of appropriate business information is a key factor in international market development and competitiveness. Trade information and market intelligence is widely available in most developed countries, along with the required expertise to use that information. Industry associations and chambers of commerce in these countries tend to have the resources to provide for the information needs of their members, and the distribution of this information is generally efficient. However, in most developing countries and LDCs, information is not widely available, but more importantly, there are serious inefficiencies in the accessibility and use of the information. There are imbalances between supply and demand because of inadequacies in distribution and the high costs associated with quality information and expertise in knowing how to apply the information. It may be found, for example, that large multinationals located in these countries have access due to an internal information system with their parent company based in a developed country, whereas SMEs, in most cases, have to rely on government export promotion agencies. A main reason sited by many SMEs as to why they do not export is the lack of sufficient and appropriate international market intelligence (e.g. understanding of buyers needs, competitor strategies, pricing, marketing channels). Even general trade information such as trade statistics is often not readily available or, when made available, it is usually out of date and considered not to be reliable.

71. The TEAM will make it possible to assess the current situation of business information in terms of its availability, its distribution (geographical and timing), the costs associated with obtaining it, the appropriateness of the information and the ability of enterprises to use the information. It will also be important to determine to what extend the country concerned has made use of international assistance in this regard, for example through use of the services of the International Trade Centre (ITC).

72. Indicators that would provide a measurement of the availability of business information include: number of institutions providing business information, type of information provided (e.g trade statistics, country profiles, prices, information relating to specific products), services offered by these institutions (e.g. research services), and international projects undertaken in the country (ITC, etc).

73. Indicators providing information on the distribution of information include: the geographical location of institutions offering information services, how the information is disseminated (e.g electronically, on paper), how up-to-date the information is and how long it takes for the institution to respond to an information request.

74. Indicators providing information of the cost of information include: whether information-providing institutions operate on a subscriber/membership basis, the cost of membership, whether there are charges associated with certain types of information, average consultancy fees, etc.

75. Indicators providing information on the appropriateness of information include: type of requests received from enterprises, level of repeat requests, level of complaints, formats in which information is presented, conversion rates from business enquiries into firm contracts, etc.

76. Finally, indicators that provide information on the available expertise in the use of business information include: qualifications of staff in institutions providing information, available training programmes/seminars, level of attendance at these training programmes/seminars, etc.

77. Players to be interviewed for the business information sector include: export promotion agencies, chambers of commerce, Department of Trade, consultants, industry associations, members (users) and international organisations operating in the country (e.g ITC officials).

5. Trade facilitation/business practice

78. Trade facilitation is the systematic rationalization of procedures, information flows and documentation. The efficiency of this sector is therefore a result of how the other trade efficiency sectors interact during the processing of an export or import order. For example, the intervention of the customs, transport, banking and insurance sectors in an international trade transaction must dovetail in the form of a timely and appropriate information flow using documents or electronic messages which are presented according to local and/or international rules and procedures. Incorrect or incomplete information can result in costly delays for the trader. Trade procedures are therefore activities, practices and formalities involved in collecting, presenting, communicating and processing data required for the movement of goods and associated payment. Poorly designed documents, complex processing, poor communications and bad management all contribute to inefficiencies in the trade process.

79. Work has been done at the international level to rationalise, standardise and simplify international trade procedures with a view to developing internationally understood and accepted efficient business practices. International organisations that have contributed to this end include, for example, the International Chamber of Commerce, the United Nations, the World Customs Organisation and the International Organisation for Standardization (ISO). The positive effects of these international rules, standards and procedures are, however, often neutralised by local laws and regulations, the ignorance of traders, complex local trade procedures/controls (particularly with regard to customs and port authorities), non-tariff barriers, etc.

80. The TEAM will make it possible to assess the level of efficiency in trade facilitation by establishing: (1) the degree to which trade facilitation is coordinated at the national level; (2) the level of awareness among the trade-related sectors and traders with regard to international standards, rules and procedures; (3) the trade process, depending on whether it involves imports or exports, the form of transport, and the form of payment used; for example, the trade procedure for an airfreight consignment sold on open account terms will most likely be more efficient than a sea freight shipment sold on documentary

credit terms; the export and import procedures are likely to differ as well; (4) the level to which electronic commerce is used.

81. Indicators that provide information on the degree to which there is trade facilitation at a national level include: the presence of trade facilitation bodies, their legal status, representation on that body and the extent to which the recommendations from that body are taken into account at the sector level.

82. Indicators that will provide information on the level of awareness among players as to international standards, rules and procedures will include: use of ISO codes in documentation, design of documentation (UN Layout Key), application of Incoterms and use of EDIFACT for electronic messages.

83. Indicators to provide information on the efficiency of trade procedures include: documentation audits on the various trade procedures, depending on whether they involve exports or imports, type of transport used and method of payment used.

84. Indicators that will provide information on the prevalence of electronic trading include: use of EDI in the sectors and prevalence of EDI/Internet services between traders and service providers.

85. Players to be interviewed for this sector include the players involved in the other five trade-related sectors, traders and international organisations.

6. Telecommunications

86. Telecommunications play a central role vis-a-vis the other trade efficiency sectors, as they provide the infrastructure through which information is transmitted or handled most efficiently. The importance of telecommunications in the context of trade efficiency is obvious, particularly when electronic commerce is seen as one of the main means of trading in the future. Good telecommunications infrastructure is vital to accommodate the numerous new applications (e.g. the Internet) available to enable enterprises to access and take advantage of international business opportunities. The telecommunications infrastructure and the availability of value-added services is well distributed in the developed countries. Enterprises in these countries are already taking full advantage of the global information infrastructure (GII), which has enhanced their ability to become globally competitive. Developing countries and LDCs, however, do not have the same degree of access, and unless this situation is drastically improved, enterprises in these countries will be further marginalised in their efforts to compete internationally.

87. In order for the TEAM to make it possible to assess to what extent the telecommunications sector impacts on the trade efficiency and international competitiveness of a country, it would be necessary to assess: (1) the level of access to telecommunications infrastructure and services; (2) the quality of the infrastructure and services; (3) the availability of value-added services; (4) the use of telecommunications for trade; and (5) the costs associated with the use of telecommunications for trade in relation to other countries.

88. Indicators that will inform on access to telecommunications infrastructure include: telephone and PC density, geographical distribution of lines, average waiting time for a line, existence of cellular networks, presence of satellite infrastructure, etc.

89. Indicators that will inform on the quality of telecommunications include: the ratio of digital to analog installations, availability of satellite communications, type of infrastructure (e.g. optical fibre or copper), adherence to international protocols (e.g. X400), etc.

90. Indicators that will inform on the availability of value-added services include: number of service providers (e.g. Internet, VANs, cellular networks, call-back operators), types of value-added services available (e.g. e-mail, video conferencing, itemized billing), etc.

91. Indicators showing the use of telecommunications applications in trade include: level of use of the Internet for business purposes (e.g marketing, services), number of EDI users, level of use of fax, e-mail or telex, etc.

92. Indicators providing information on the cost of telecommunications include: cost per unit (local and international), cost of installation of lines, line rentals, cost for Internet access, etc.

93. Players that would be interviewed include: Ministry of Telecommunications, telecommunications providers (telephone, cellular), Internet service providers, universities, software developers/vendors, traders, banks and large corporate users.

V. STAGE 4 - IMPLEMENTATION AND EXPECTED OUTPUT OF THE TRADE EFFICIENCY ASSESSMENT METHODOLOGY (TEAM)

1. Initiating the assessment

94. A member State wishing to participate in a trade efficiency assessment would make an official request to UNCTAD to undertake the assessment. Along with the request, the member State should be willing to commit itself to the objectives of the assessment and be willing to provide assistance in the form of local resources (e.g. local expertise, information, etc.) and the necessary mandate to carry out the study. A local support for the TEAM is essential, and participation of the relevant bodies in a local TEAM committee would be a prerequisite. Approval of the assessment would be subject to funding being made available for the project.

2. A typical assessment

95. A typical assessment is expected to take six months. The assessment would follow the steps explained in the schedule of activities (table 1). Phase one of the assessment would involve two main objectives namely:

- Assessing the general trading environment;
- Formation of a local counterpart - TEAM committee/task team.

96. One UNCTAD expert would be required for this phase and one mission of approximately two weeks. The end result of this phase would be the production of a documented assessment of the general trading environment which would provide the basis for the design of phases two and three.

97. Phase two of the TEAM initiates the census of traders' needs. This phase includes:

- Conducting a mail survey of a relatively large sample of mainly small and medium-size enterprises;
- Conducting interviews with a selection of enterprises representative of the mail sample.

98. Three UNCTAD experts would be required for this phase, and one mission of approximately four weeks would take place. The three experts would include: an expert to cover the transport, trade facilitation and customs sectors; an expert to cover the banking and insurance sector; and an expert to cover the telecommunications and business information sector. All three experts would contribute jointly to the design of the questionnaire and would assist in carrying out the interviews of traders. The end result of this phase would be a quantifiable traders' perception of the six sectors with regard to trade efficiency. At the end of each phase, the local TEAM committee would be consulted on the progress achieved in order to obtain a local perspective.

99. Phase three of the TEAM initiates the analysis of the trade efficiency of the six trade related sectors. The output of this phase includes:

- Conducting interviews of all the relevant players in each of the sectors;
- Conducting desk research, audits and analysis of available and appropriate information that would provide information on the performance of the sectors.

100. The same three experts used for phase two would participate in phase three. Much of the research, questionnaire design and identification of players would occur simultaneously with phase two. The mission mentioned in phase two would serve to analyze the six sectors as well. In this regard however, the experts would deal with their own respective sectors. The end result of this phase would include a quantification of the views and information on the current performance of the sectors.

101. Phase four includes a statistics expert in addition to the three UNCTAD experts used in phase two and three. All information gathered would be collated and analyzed statistically. The output of phase four includes:

- A collation of the results of the assessment;
- Indexing of the six sectors for international comparison;
- A summary of findings (qualitative);
- A set of recommendations.

102. The end result of this phase would be the final result of the TEAM, and the member State concerned would be consulted with regard to the recommendations and possible solutions.

3. The expected output of the trade efficiency assessment

103. The expected output of the trade efficiency assessment includes the following:

- A detailed report on the findings of the assessment;
- A summary of the findings;
- An internationally comparable index for each of the six sectors;
- A set of recommendations and proposed solutions specific to the member State concerned;
- An awareness programme based on publicizing the findings to the relevant parties in the country;
- The formation of a permanent local trade facilitation body to continue monitoring trade efficiency and to oversee the implementation of the recommendations (this output may require a certain amount of training and a budgetary commitment from the Government).

4. Implementation of the results of the trade efficiency assessment

104. The member State concerned, along with its local trade facilitation body and UNCTAD, would then set about formulating a plan according to the recommendations of the assessment. The member State would commit itself to a further assessment at a later date with the aim of improving its trade efficiency index during that time. It can be foreseen, once enough countries have undergone the assessment, this index will be published and serve as an important yardstick for international investors.

Table 1: SCHEDULE OF ACTIVITIES

ACTIVITY	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6
Part 1 (one UNCTAD expert)						
The general trading environment						
Desk research	XXX					
Mission I		XXX				
Appointment of local counterpart(s)		XXX				
First meeting of local TEAM committee			X			
Draft report on general trading environment		XXX				
Part 2 (three UNCTAD experts)						
Census of traders' needs						
Design of questionnaire			XX			
Development of mailing lists			XX			
Mailing			X			
Sample group for interviews			XX			
Interviews of traders (Mission II)			XXXXXXXX			
Second meeting with local TEAM committee			X			
Statistical analysis of survey					XXXXXX	
Part 3 (three UNCTAD experts)						
Analysis of the six trade-related sectors						
Design of questionnaire's for each sector			XXXX			
Identification of role players for each sector			XXXX			
Interviews of role players (Mission II)			XXXXXXXX			
Third meeting with local TEAM committee				X		
Statistical analysis of results from interviews					XXXXXX	
Part 4 (four UNCTAD experts)						
Analysis of results and formulation of findings						
Compilation of results						XXX
Determination of findings						
Indexing						XXX
Recommendations						XXX